

REMARKS/ARGUMENTS

Claims 1-5, 7-11 and 13-25 are active in the case.

Claim 1 has been amended to specify that the first catalyst and the second catalyst are not mixed together. Basis for this limitation may be found on page 8, third full paragraph and the examples in the specification.

No new matter has been added into the amended claim.

The rejection of Claims 1-5, 18, 20, 22 and 24 under 35 U.S.C. §102(e) as anticipated by Kobayashi et al is traversed.

Kobayashi et al do not anticipate the claims, as amended, since Kobayashi et al clearly disclose a single catalyst of a mixture of a zeolite and a metal oxide containing at least one element of the platinum group or a single catalyst of an alumina having a specific pore size distribution, the alumina being loaded with one or more elements of the platinum group. The above catalysts are not mixed together or used in combination as a first catalyst and second catalyst which are not mixed together and which are arranged in a manner such that the organic compound(s) to be removed is/are contacted first with the first catalyst, then with the second catalyst, as in the present claims. All of the examples with the exception of Example 12 show mixtures of one or the other of the platinum containing catalysts mixed with either a zeolite not containing platinum or an alumina not containing platinum and are never used as a mixture of a zeolite containing platinum and an alumina containing platinum. Example 12 shows a front stage catalyst and a rear stage catalyst, with no mixing together, with the front stage catalyst being sodium-formed mordenite containing no platinum and the rear stage catalyst containing platinum-loaded alumina. Therefore, it is clear that Kobayashi et al does not anticipate the claims, as amended.

Further, comparative data in the specification distinguishes the claims over Kobayashi et al. Examples 1 and 2 of the present invention, which use alumina containing platinum as the first catalyst and a zeolite containing alumina and platinum as the second catalyst are compared to Comparative Example 2 which uses the same catalyst 6 of Example 6 of Kobayashi et al. as a mixture and Comparative Example 3, which uses the catalyst of Example 1 of the present invention, except that the first stage and the second stage are reversed from the arrangement of Example 1. The catalyst performance evaluation is shown on pages 12 and 13 of the specification and the superior performance of the catalysts 1-2, arranged according to the present claims, is demonstrated over Comparative catalyst 2, according to Kobayashi et al., and Comparative catalyst 3 in which the arrangement of the catalysts are opposite that of the present claims. The highest temperature necessary for conversion of 95% of the hydrocarbons in the treated gas stream is 196°C for catalyst 1 of the present invention, 235°C for catalyst 2 of the present invention, 300°C for Comparative catalyst 2, according to Kobayashi et al., and 471°C for Comparative catalyst 3, an arrangement of catalysts opposite to that of the present claims. The highest temperature for conversion of 99% of hydrocarbons in the treated gas stream is 235°C for catalyst 1, 272°C for catalyst 2, 314°C for Comparative catalyst 2 and 480°C for Comparative catalyst 3. Superior results are shown for the catalyst of the present claims, because much lower temperatures are required for conversion of 95% and 99% of the hydrocarbons in the treated gas, as compared to Comparative catalysts 2 and 3, which are outside the catalysts of the present claims. Therefore, the claims also distinguish over Kobayashi et al.

The rejection of Claims 7-11, 13-17, 19, 21, 23 and 25 under 35 U.S.C. §103(a) as unpatentable over Kobayashi et al. in view of Patil et al. is traversed. The superior results shown for the catalyst of the present claims, discussed in the response to the rejection over Kobayashi et al. alone, distinguishes the claims over the combination of references.

Application No. 09/777,853
Reply to Office Action of February 5, 2004

It is submitted that Claims 1-5, 7-11 and 13-25 are allowable and such action is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220



Roland E. Martin
Registration No.: 48,082